

## **REMARKS**

This response sets forth amendments and remarks previously filed in Applicants' Amendment After Final Rejection filed May 23, 2005, which Amendment was not entered on the record by Examiner Dote, and additionally addresses Examiner Dote's comments as set forth in the Advisory Action of June 13, 2005.

Reconsideration of the above-identified application in view of the above amendments and following remarks is respectfully requested. In the amendment, claim 27 is amended to correct an obvious typographical error in the spelling of "strontium." Claims 30, 40, and 46 are amended for clarity to delete the term "about" from the upper limit of the 2 minute charge level. Claim 30 is also amended for clarity to provide that the toner particles can contain a toner binder resin that comprises a cross-linked styrene acrylate polymer. Claims 9 and 32 are amended to depend from claim 40. Claims 2, 5-7, 10, 11, 14, 36, and 45, previously dependent on claim 31, are amended to depend from claim 46. Support for these amendments can be found throughout the present application, including the examples of the application as well as the claims as originally filed. For example, see page 8, lines 11-18, and page 19, line 20, through page 20, line 1, of the application. Claims 31, 37, and 44 are cancelled without prejudice to or disclaimer of the subject matter therein.

Applicants thank Examiner Dote for consideration of the last amendment, and withdrawal of various rejections in view thereof. Applicants also thank Examiner Dote for consideration and acknowledgement of the references cited in the Information Disclosure Statement submitted January 14, 2005.

### **Rejection of claims 4, 17, 30, 35, and 44 under 35 U.S.C. §112, first paragraph**

At page 4 of the Office Action, claims 4, 17, 30, 35, and 44 are rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. It is alleged that the originally-filed specification does not provide an adequate written description of the toner particles because the term "cross-linked styrene-acrylate polymer" as recited in claims 30 and 44 is broader than the disclosed toner binder resin because it encompasses the polymer being used other than as a toner binder resin. For the following reasons, this rejection is respectfully traversed.

Claim 30, from which claims 4, 17, and 35 ultimately depend, is amended to provide that the toner particles can contain a toner binder resin that comprises a cross-linked styrene acrylate polymer, thereby clarifying that the cross-linked styrene acrylate

polymer is used as a toner binder resin, as supported by the specification at least at page 9, lines 19-20, of the specification and as recommended by Examiner Dote in the Office Action of February 23, 2005. Claim 44 is canceled, rendering the rejection as to this claim moot. For at least the above reasons, reconsideration and withdrawal of the rejection are in order and are respectfully requested.

**Rejection of claims 4, 17, 30, and 35 under 35 U.S.C. §102(e) over Fields et al. '880 as evidenced by U.S. Provisional Patent Application No. 60/290,707**

At page 6 of the Office Action, claims 4, 17, 30, and 35 are rejected under 35 U.S.C. §102(e) over Fields et al. '880 (U.S. Patent No. 6,692,880 B2) as evidenced by U.S. Provisional Patent Application No. 60/290,707. It is alleged that Fields et al. '880 exemplifies a developer comprising a magnetic carrier and toner particles, and that the toner particles comprise 88.9 wt.% of a cross-linked styrene-butylacrylate copolymer associated with the tradename SB77X1, produced by Eastman Kodak, 6.2 wt.% of carbon black, 1.5 wt.% of an organo iron complex charge control agent associated with the tradename T77, and 2.0 wt.% of a polyethylene wax. It is asserted that the toner particles are surface-treated with 0.30 wt.% of hydrophobic silica associated with the tradename R972 silica, obtained from Nippon Aerosil. It is further asserted that Fields et al. '880 describes the toner particles as having a MECCA charge-to-mass ratio (Q/m) of -16.8  $\mu\text{C/g}$  after mixing the toner particles with a magnetic carrier for 2 minutes, and that after mixing the toner particles with the magnetic carrier for 10 minutes, the toner particles had a MECCA Q/m of -19.4  $\mu\text{C/g}$ . It is further alleged that the charge ratio of the Q/m at 2 minutes to the Q/m at 10 minutes is 0.9, which is numerically within the range of about 0.9 to about 1.1 recited in instant claim 30. For the following reasons, this rejection is respectfully traversed.

As pointed out in Applicants' previous response, none of the formulations set forth in Fields et al. '880 that recited a 2'/10' MECCA charge ratio of from about 0.9 to about 1.1 have a 2 minute charge level of from about -20 to about -30  $\mu\text{C/g}$ . (See Table 3 of Fields et al. '880). Contrary to the position taken by the Patent Office, a charge level of -16.8  $\mu\text{C/g}$  does **not** fall within the range of about -20 to about -30  $\mu\text{C/g}$ . While not agreeing with the position taken by the Patent Office, in order to facilitate prosecution, Applicants herein amend claim 30 to delete the term "about" from the upper limit of the 2 minute charge level, so that the upper limit of the claimed range is -20. The charge level of -16.8  $\mu\text{C/g}$  found in Fields et al. '880 is over 15% greater than the upper limit of -20 of the claimed range. As

stated in the MPEP at 2131.03 (III), "prior art which teaches a value or range that is very close to, but does not overlap or touch, the claimed range does not anticipate the claimed range." Because the charge level taught by Fields et al. '880 does not fall within the recited range of claim 30, from which the other rejected claims depend, reconsideration and withdrawal of the rejection are in order, and are respectfully requested.

**Rejection of claims under 35 U.S.C. §102(e) or, in the alternative, under 35 U.S.C. §103(a), over Fields et al. '880**

The following related rejections have been set forth, and are addressed together in the following remarks.

(1) At page 7 of the Office Action, claims 33, 38, 40, and 41 are rejected under 35 U.S.C. §102(e) or, in the alternative, under 35 U.S.C. §103(a), over Fields et al. '880 as evidenced by U.S. Provisional Patent Application No. 60/290,707. Further to the arguments set forth at pages 6 and 7 of the Office Action, it is alleged that the toner particles in Example 6 of Fields et al. '880 meet the compositional limitations recited in the instant claims, except "Fields'880 does not expressly disclose that its toner particles comprise silica as recited in the instant claims" (see page 8 of the Office Action).

(2) At page 9 of the Office Action, claims 13 and 22 are rejected under 35 U.S.C. §102(e) or, in the alternative, under 35 U.S.C. §103(a) over Fields et al. '880 as evidenced by U.S. Provisional Patent Application No. 60/290,707.

(3) At page 10 of the Office Action, claims 25-27 are rejected under 35 U.S.C. §103(a) over Fields et al. '880 as evidenced by U.S. Provisional Patent Application No. 60/290,707, combined with Saha (U.S. Patent No. 5,500,320).

(4) At page 12 of the Office Action, claims 28 and 29 are rejected under 35 U.S.C. §103(a) over Fields et al. '880 as evidenced by application '707, combined with Saha, and further combined with Creatura (U.S. Patent No. 5,102,769).

For at least the following reasons, all of the above rejections are respectfully traversed.

Applicants invention as set forth in independent claim 40, from which all other rejected claims ultimately depend, is directed to toner particles comprising toner resin, at least one charge control agent, inorganic particles in the toner resin, and a surface treatment agent on the surface of the toner particles. Both the surface treatment agent and the inorganic particles comprise silica.

It is admitted by the Patent Office that Fields et al. '880 "does not expressly disclose that its toner particles comprise silica as recited in the instant claims" (see page 8 of the Office Action). Despite this admission, the Patent Office asserts that, because it believes the toner particles of Fields et al. '880 meet the compositional limitations recited in claims 40 and 33, "it is reasonable to presume that the toner particles in example 6 of Fields'880 comprise the silica as recited in the instant claims" (see Office Action at page 9).

As explained earlier herein, Fields et al. '880 does not teach or suggest a two minute charge level of from -20 to about -30  $\mu$  C/g, and therefore does not meet the compositional limitations of the claimed invention. Further, as admitted by the Patent Office, Fields et al. '880 does not disclose or suggest the presence of silica in the toner particles. Under 35 U.S.C. §102, the applied reference must teach each and every feature of the claimed invention to anticipate it. The Patent Office admits the reference does not teach every feature, thus rejection of claims 33, 38, 40 and 41 under at least 35 U.S.C. §102(e) must be withdrawn. With respect to the rejection under 35 U.S.C. §103(a), applicants again submit that not every feature of the invention is taught or suggested, including both the presence of silica in the toner particles, and a two minute charge level of from -20 to about -30  $\mu$  C/g, and that the rejection should be withdrawn.

In addition to the above, in order to further prosecution, Applicants include herein below a Statement of Common Ownership, noting that the present application has a filing date of June 13, 2001, and the Fields et al. '880 reference, which has an issue date of February 17, 2004, can only be used as §102(e)/103 prior art. It is admitted by the Patent Office in the Advisory Action of June 13, 2005, that the Statement of Common Ownership overcomes the above rejections by removing Fields et al. '880 as a reference. Withdrawal of the cited rejections is in order and is respectfully solicited.

#### **STATEMENT OF COMMON OWNERSHIP**

The present application, Application No. 09/880,689, and U.S. Patent No. 6,692,880 B2 were, at the time the invention of Application No. 09/880,689 was made, jointly owned by, or subject to an assignment to, Heidelberg Digital L.L.C. and NexPress Solutions, L.L.C. Copies of the recorded assignments for Fields et al. '880 and the present application were attached to the Applicants' previous response. Accordingly, the provisions of 35 U.S.C. §103(c) apply to the present application with respect to Fields et al. '880, and any 35 U.S.C. §103 rejection for obviousness based on Fields et al. '880 should be withdrawn.

**Rejection of claims 4, 17, 30, 35, and 44 under 35 U.S.C. §102(a), 35 U.S.C. §102(e) or 35 U.S.C. §103(a) over Fields et al. '466**

At page 15 of the Office Action, claims 4, 17, 30, 35 and 44 are rejected under 35 U.S.C. §102(a) or, in the alternative, under 35 U.S.C. §103(a), and under 35 U.S.C. §102(e) or, in the alternative, under 35 U.S.C. §103(a), over Fields et al. '466 (U.S. Patent No. 6,197,466), as evidenced by ACS File Registry No. 60806-47-5. It is alleged that Fields et al. '466 teaches that after mixing the toner particles with the magnetic hard ferrite carrier for 2 minutes, the toner particles had a charge level of  $-15.6 \mu\text{C/g}$ , and after mixing the toner particles with the magnetic hard ferrite carrier for 10 minutes, the toner particles had a charge level of  $-17.6 \mu\text{C/g}$ . It is alleged that two minute charge levels of  $-15.6 \mu\text{C/g}$  meets the limit, "about  $-20 \mu\text{C/g}$ ," in the range "about  $-20$  to about  $-30 \mu\text{C/g}$ " recited in independent claim 30. It is acknowledged by the Patent Office that Fields et al. '466 does not disclose that the charge levels were determined using a MECCA device as recited in Applicants' claims. For the following reasons, this rejection is respectfully traversed.

Claim 44 is cancelled, rendering the rejection as to this claim moot.

Claim 30 is independent, and all other rejected claims depend ultimately therefrom. As admitted by the Patent Office, Fields et al. '466 does not teach a charge level determined using a MECCA device. Further, as also admitted, the 2 minute charge level of Fields et al. '466 is  $-15.6 \mu\text{C/g}$ , which does **not** fall within the range of about  $-20$  to about  $-30 \mu\text{C/g}$ . While not agreeing with the position taken by the Patent Office, in order to facilitate prosecution, Applicants herein amend claim 30 to delete the term "about" from the upper limit of the 2 minute charge level, so that the upper limit of the claimed range is  $-20$ . The disclosed charge level of  $-15.6 \mu\text{C/g}$  is over 22% greater than the upper limit of  $-20 \mu\text{C/g}$  of Applicants' claimed range. As stated in the MPEP at 2131.03 (III), "prior art which teaches a value or range that is very close to, but does not overlap or touch, the claimed range does not anticipate the claimed range." Because the charge level taught by Fields et al. '466 does not fall within the recited range of claim 30, from which the other rejected claims depend, reconsideration and withdrawal of the rejections are in order, and are respectfully requested.

**Rejection of claims 2, 5, 6, 14, 16, 23, 31-33, 36, 37-41, 45, and 46 under 35 U.S.C. §102(a), 35 U.S.C. §102(e) or 35 U.S.C. §103(a) over Fields et al. '466**

At page 18 of the Office Action, claims 2, 5, 6, 14, 16, 23, 31-33, 36, 37-41, 45, and 46 are rejected under 35 U.S.C. §102(a) or, in the alternative, under 35 U.S.C. §103(a), and under 35 U.S.C. §102(e) or, in the alternative, under 35 U.S.C. §103(a), over Fields et al. '466 (U.S. Patent No. 6,197,466), as evidenced by ACS File Registry No. 60806-47-5. The Patent Office asserts that the toner particles in Example 5 of Fields et al. '466 "meet the compositional limitations recited in the instant claims **but for** the presence of colloidal silica or silica in the toner binder resin" (emphasis added, Office Action at page 18, and again at page 19). It is further alleged that the Fields et al. '466 two minute charge level of  $-15.6 \mu\text{C/g}$  meets the limit "about  $-20 \mu\text{C/g}$ " in the range set forth in independent claims 40 and 46. For the following reasons, this rejection is respectfully traversed.

Claims 31 and 37 are canceled, and claims previously dependent therefrom now depend from claim 46. The rejection with regard to claims 31 and 37 is moot. Claim 32 and claims dependent therefrom now depend from claim 40 and are addressed therewith.

Regarding independent claims 40 and 46, and the claims 2, 5, 6, 14, 16, 23, 32, 36, 39, 33, 38, 41, and 45 dependent therefrom, none of the formulations set forth in Fields et al. '466 that recite a 2'/10' MECCA charge ratio of from about 0.9 to about 1.1 have a 2 minute charge level of from about  $-20$  to about  $-30 \mu\text{C/g}$ . In order to facilitate prosecution, Applicants herein amend claims 40 and 46 to delete the term "about" from the upper limit of the 2 minute charge level, so that the upper limit of the claimed range is  $-20$ . The disclosed charge level of  $-15.6 \mu\text{C/g}$  is over 22% greater than the upper limit of  $-20 \mu\text{C/g}$  of Applicants' claimed range. As stated in the MPEP at 2131.03 (III), "prior art which teaches a value or range that is very close to, but does not overlap or touch, the claimed range does not anticipate the claimed range." Thus, Fields et al. '466 does not disclose or suggest the claimed invention.

For at least the above reasons, reconsideration and withdrawal of the rejections under 35 U.S.C. §102(a), §102(e), and §103(a) over Fields et al. '466 are in order and are respectfully requested.

**Rejection of claims 9, 10, 18 and 19 under 35 U.S.C. §102(a), 35 U.S.C. §102(e) or 35 U.S.C. §103(a) over Fields et al. '466**

At page 20 of the Office Action, claims 9, 10, 18, and 19 are rejected under 35 U.S.C. §102(a) or, in the alternative, under 35 U.S.C. §103(a), and under 35 U.S.C. §102(e) or, in the alternative, under 35 U.S.C. §103(a), over Fields et al. '466 (U.S. Patent No. 6,197,466), as evidenced by ACS File Registry No. 60806-47-5. The Patent Office again asserts that "the toner particles in Example 5 of Fields'466 meet the compositional limitations recited in the instant claims but for the presence of the colloidal silica or silica in the toner resin" (see page 21), and that the toner particles are presumed to comprise the colloidal silica or silica recited in instant claims. For at least the following reasons, this rejection is respectfully traversed.

Claims 9, 10, 18, and 19 depend from independent claims 40 or 46, each of which require a 2 minute charge level of from -20 to about -30  $\mu$  C/g. The disclosed charge level in Fields et al. '466 of -15.6  $\mu$  C/g is over 22% greater than the upper limit of -20  $\mu$  C/g of Applicants' claimed range. As stated in the MPEP at 2131.03 (III), "prior art which teaches a value or range that is very close to, but does not overlap or touch, the claimed range does not anticipate the claimed range." Thus, Fields et al. '466 does not disclose or suggest the claimed invention. For at least these reasons, reconsideration and withdrawal of the rejections are in order and are respectfully requested.

**Rejection of claims 7, 11, 13, 15, 20, 22, and 24 under 35 U.S.C. §103(a) over Fields et al. '466, combined with Akimoto**

At page 22 of the Office Action, claims 7, 11, 13, 15, 20, 22, and 24 were rejected under 35 U.S.C. §103(a) over Fields et al. '466, as evidenced by ACS File registry number 60806-47-5, combined with Akimoto (US 5,707,772). For the following reasons, this rejection is respectfully traversed.

Claims 7, 11, 13, 15, 20, 22, and 24 depend ultimately from either claim 46 or claim 40. As discussed above, and incorporated herein, none of the formulations set forth in Fields et al. '466 that recite a 2'/10' MECCA charge ratio of from about 0.9 to about 1.1 have a 2 minute charge level of from -20 to about -30  $\mu$  C/g as required by independent claims 40 and 46. Akimoto was cited for its alleged teachings regarding a polyethylene releasing agent and does not contain any teaching or suggestion sufficient to overcome the

deficiencies of Fields et al. '466. For at least the above reasons, reconsideration and withdrawal of the rejection are in order and are respectfully requested.

**Rejection of claims 25-29 under 35 U.S.C. §103(a) over Fields et al. '466**

At page 24 of the Office Action, claims 25-27 were rejected under 35 U.S.C. §103(a) over Fields et al. '466, as evidenced by ACS File registry number 60806-47-5, combined with Saha (US 5,500,320). At page 25 of the Office Action, claims 28 and 29 were rejected under 35 U.S.C. §103(a) over Fields et al. '466, as evidenced by ACS File Registry No. 60806-47-5, combined with Saha and further in view of Creatura (US 5,102,769). For the following reasons, each rejection is respectfully traversed.

Claims 25-29 ultimately depend from independent claim 40. None of the formulations set forth in Fields et al. '466 that recite a 2'/10' MECCA charge ratio of from about 0.9 to about 1.1 have a 2 minute charge level of from -20 to about -30  $\mu$  C/g as required by independent claim 40. The disclosed charge level of -15.6  $\mu$  C/g is over 22% greater than the upper limit of -20  $\mu$  C/g of Applicants' claimed range. As stated in the MPEP at 2131.03 (III), "prior art which teaches a value or range that is very close to, but does not overlap or touch, the claimed range does not anticipate the claimed range." Thus, Fields et al. '466 does not disclose or suggest the claimed invention.

Saha was cited for its alleged teachings regarding strontium ferrite particles, and Creatura was cited for its alleged teachings regarding magnetic carrier particles coated with a polymeric coating. Neither secondary reference contains any teaching or suggestion sufficient to overcome the deficiencies of Fields et al. '466. For at least the above reasons, reconsideration and withdrawal of the rejections are in order and are respectfully requested.

**CONCLUSION**

In view of the foregoing remarks, Applicants respectfully submit all of pending claims 2, 4-7, 9-11, 13-20, 22-33, 35-41, 45, and 46 are in condition for allowance. Prompt and favorable action in the form of a Notice of Allowance are thus respectfully solicited.



Should the Examiner require anything further, or have any questions, the Examiner is asked to contact Applicants' undersigned representative.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Kathleen Neuner Manne', followed by a long horizontal flourish line extending to the right.

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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.